

MARKED-UP AMENDED CLAIMS 9-11 AND 13-24

9. (Amended) A method according to [one of the preceding claims] claim 1, characterized in that the amplification reaction is achieved with the polymerase chain reaction (PCR).

10. (Amended) A method according to [one of the preceding claims] claim 1, characterized in that the probe contains only one CpG.

11. (Amended) A method according to [one of the preceding claims] claim 1, characterized in that the probe contains several CpGs.

13. (Amended) A method according to [one of the preceding claims] claim 1, characterized in that the probe can be end labeled or internally labeled.

14. (Amended) A method according to [one of the preceding claims] claim 1, characterized in that the methylation information is determined by the change in fluorescence intensity during subsequent rounds of PCR.

15. (Amended) A method according to [one of the preceding claims] claim 1, characterized in that the sample DNA is only amplified by chosen PCR primers if a certain methylation state is present at a specific site in the sample DNA.

16. (Amended) A method according to [one of the preceding claims] claim 1, characterized in that the sample DNA is only amplified if a certain methylation state was present at a specific site in the sample DNA, the sequence context of which is essentially complementary to one or more oligonucleotides or PNA oligomers which are additionally used in the PCR reaction.

17. (Amended) A method according to [one of the preceding claims] claim 1, characterized in that the amplification from the 3'-end of the probe is blocked by phosphorylation.

18. (Amended) A method according to [one of the preceding claims] claim 1 that a melting curve is generated at the end of the PCR to gather additional data.

19. (Amended) A method according to [one of the preceding claims] claim 1 wherein the fluorescent moiety is a fluorescent dye, a rhodamine dye, or a cyanine dye.

20. (Amended) A method according to [one of the preceding claims] claim 1 wherein the quencher moiety is a rhodamine dye.

21. (Amended) A method according to [one of the preceding claims] claim 1 wherein the deamination treatment of the DNA is performed with a bisulfite reagent.

22. (Amended) A method according to [one of the preceding claims] claim 1 whereby the DNA sample is cleaved prior to deamination treatment with restriction endonucleases.

23. (Amended) A method according to [one of the preceding claims] claim 1 whereby the DNA sample is isolated from mammalian sources e.g. cell lines, blood, sputum, faeces, urine, cerebrospinal fluid, tissue embedded in paraffin, for example, ocular tissue, intestine, kidney, brain, heart, prostate, lung, chest or liver, histological slides and all possible combinations.

24. (Amended) Use of a pre-treated genomic DNA according to [one of the preceding claims] claim 1 for the determination of the methylation status of a corresponding genomic DNA.